

In the Claims:

Claims 1, 2, 5 and 8 are amended herein. Non-elected claims 3, 4, 6, 7 and 9-16 are canceled.

1. (currently amended) A fabrication method for a computer-generated hologram in which a three-dimensional object having visualized cross-sectional surfaces is recorded, including:

a step of obtaining a number of two-dimensional image data of [a] the three-dimensional object;

a step of producing three-dimensional image data composed only of surface data of the three-dimensional object from the two-dimensional image data obtained in the above step;

a step of cutting the three-dimensional object image data composed only of the surface data produced in the above step along a predetermined cross section;

a step of defining the shape of the three-dimensional object to be recorded in a hologram by adding surface data representing cross-sectional surfaces on the cut cross section to the same;

a step of defining the arrangement of the three-dimensional object defined in the above step, a hologram plane, and a reference beam to compute interference fringes on the hologram plane; and

a step of recording the interference fringes computed in the above step onto a recording medium.

2. (currently amended) A fabrication method for a computer-generated hologram in which a three-dimensional object having visualized cross-sectional surfaces is recorded as claimed in claim 1, wherein said two-dimensional image data of the three-dimensional object are obtained by an X-ray CT (X-ray Computer Tomography), an MRI (Magnetic Resonance Imaging), or a TEM (Transmittance Electron Microscope).

3. (canceled)

4. (canceled)

5. (currently amended) A computer-generated hologram in which a three-dimensional object having visualized cross-sectional surfaces is recorded, wherein the computer-generated hologram is fabricated by a fabrication method for a computer-generated hologram in which a three-dimensional object having visualized cross-sectional surfaces is recorded as claimed in any one of claims 1 through 4 or 2.

6. (canceled)

7. (canceled)

8. (currently amended) A printed matter with a computer-generated hologram attached at a predetermined position thereof, the computer-generated hologram being fabricated by a fabrication method for a computer-generated hologram in which a three-

dimensional object having visualized cross-sectional surfaces is recorded, the method including:

a step of obtaining a number of two-dimensional image data of [a] the three-dimensional object;

a step of producing three-dimensional image data composed only of surface data of the three-dimensional object from the two-dimensional image data obtained in the above step;

a step of cutting the three-dimensional object image data composed only of the surface data produced in the above step along a predetermined cross section;

a step of defining the shape of the three-dimensional object to be recorded in a hologram by adding surface data representing cross-sectional surfaces on the cut cross section to the same;

a step of defining the arrangement of the three-dimensional object defined in the above step, a hologram plane, and a reference beam to compute interference fringes on the hologram plane; and

a step of recording the interference fringes computed in the above step onto a recording medium.

9. (canceled)

10. (canceled)

11. (canceled)

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (canceled)